

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (currently amended) A system for allocating resources to enable provision
2 of different levels of service for different users of a network having a plurality of nodes at which
3 routers are placed to direct information along various paths, the plurality of nodes including a
4 first node, the system comprising:

5 a first allocation of resources for the plurality of nodes, the first allocation being
6 made by a first management system external to the plurality of nodes that manages at least part
7 of the network; and

8 a second allocation of resources [[for]]at the first node, the second allocation
9 being a local allocation, the second allocation being made by a second management system
10 having a limited capability compared to the first management system and usable by the first node
11 in accordance with priorities determined at the first node.

1 2. (original) A system as in claim 1 further comprising a flow control table
2 at the node operating under control of the second management system for storing entries which
3 each include:

4 source addresses representative of at least one source of information arriving at
5 the input port;

6 destination addresses representative of at least one of the destinations to which the
7 arriving information is to be sent from the output port;

8 priority information for each address consisting of a capability of at least two
9 different priorities for controlling the forwarding of information arriving from the source to the
10 destination; and

11 wherein with the priority information is changeable at the node without reference
12 to the first management system.

1 3. (previously presented) A system as in claim 2 wherein the system
2 includes a router for switching information and a controller coupled to the router for storing the
3 flow control table and controlling the router in response thereto.

1 4. (previously presented) A system as in claim 3 wherein the priority
2 information includes default priority information used to control information which does not
3 otherwise have an entry in the flow control table.

1 5. (original) A system as in claim 3 wherein the router has a capacity and
2 not all of the capability of the router is allocated by the controller.

1 6. (original) A system as in claim 5 wherein the unallocated portion of the
2 capacity is reserved for use as a virtual private network.

1 7. (original) A system as in claim 6 wherein the controller manages the flow
2 control table using two application program interfaces.

1 8. (original) A system as in claim 7 wherein the applications program
2 interfaces include a first one for managing default priority information for a longer term usage,
3 and a second one for managing the remaining entries of the flow control table for a shorter term
4 usage.

1 9. (original) A system as in claim 8 wherein the first and second applications
2 program interfaces are under control of a network management system.

1 10. (original) A system as in claim 9 wherein the network management
2 system is controlled by a network service provider.

1 11. (original) A system as in claim 9 wherein the first applications program
2 interface is controlled by a network service provider and the second applications program
3 interface is controlled by a provider of the source of information.

1 12. (original) A system as in claim 11 wherein the controller manages the
2 flow control table using a single applications program interface.

1 13. (original) A system as in claim 12 wherein the applications program
2 interface manages default priority information for longer term usage and manages the remaining
3 entries of the flow control table for shorter term usage.

1 14. (currently amended) In a system for dynamically allocating resources to
2 enable provision of different levels of service for different users of a network having nodes at
3 which routers are placed to direct information along various paths, a method comprising:
4 allocating a first level of service from a remote source for a plurality of nodes, the
5 plurality of nodes including a first node;
6 allocating a second level of service from a local source ~~for~~at the first node, the
7 second level of service using resources available from the first level of service;
8 receiving information at an input port from a source;
9 storing in a flow control table entries which include source addresses
10 representative of a source of information arriving at the input port, destination addresses
11 representative of a destination to which the arriving information is to be sent, and priority
12 information for each source address, which priority information includes at least two different
13 priorities; and
14 forwarding information arriving from the source to the destination address with a
15 priority based upon the priority information in the flow control table.

1 15. (original) A method as in claim 14 wherein the method further comprises
2 using a controller coupled to the router to store the flow control table and controlling the router
3 in response thereto.

1 16. (original) A method as in claim 15 wherein the method further comprises
2 using default priority information to control arriving information which does not otherwise have
3 an entry in the flow control table.

1 17. (original) A method as in claim 16 wherein the router has a capacity; and
2 the method comprises using the controller to allocate less than all of the capacity of the router.

1 18. (original) A method as in claim 17 wherein the method further comprises
2 reserving unallocated capacity of the router for use as a virtual private network.

1 19. (original) A method as in claim 18 wherein the method further comprises
2 using applications program interfaces to allow the controller to manage the flow control table.

1 20. (original) A method as in claim 19 wherein method further comprises
2 using a first applications program interface to manage default priority information for longer
3 term usage, and using a second applications program interface to manage remaining entries of
4 the flow control table for shorter term usage.

1 21. (original) A method as in claim 20 further comprising using a network
2 management system to control the first and second applications program interfaces.

1 22. (original) A method as in claim 21 further comprising using a network
2 service provider to control the network management system.

1 23. (original) A method as in claim 22 further comprising using a network
2 service provider to control the first applications program interface and using a provider of the
3 source of information to control the second applications program interface.

1 24. (original) A method as in claim 23 further comprising using a single
2 applications program interface to manage the flow control table

- 1 25. (original) A method as in claim 24 further comprising using the
2 applications program interface to manages default priority information for longer term usage and
3 using the remaining entries of the flow control table to manage for shorter term usage.